ACC.13
62nd Annual Scientific Session & Expo
TCT@ACC-i2

E1326
JACC March 12, 2013
Volume 61, Issue 10

Practice Performance, Improvement and Adminsitration

THE ASSOCIATION BETWEEN DRIVE TIME AND REPERFUSION THERAPY USE AMONG STEMI PATIENTS TRANSFERRED FROM A NON-PRIMARY PCI HOSPITAL: A REPORT FROM THE MISSION: LIFELINE PROGRAM

Poster Contributions
Poster Sessions, Expo North
Monday, March 11, 2013, 9:45 a.m.-10:30 a.m.

Session Title: A Potpourri of Insights from Contemporary Cardiology Registries
Abstract Category: 22. Performance Improvement
Presentation Number: 1305-272

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Background: Guidelines recommend a door to balloon time (DTB) ≤120 minutes for STEMI patients transferred for primary percutaneous coronary intervention (pPCI) or fibrinolysis for eligible patients who cannot achieve this metric. However, the association of inter-hospital drive time with reperfusion strategy selection has not been well-characterized.

Methods: We identified 2,386 unique pairs of STEMI referral and receiving centers in ACTION Registry-GWTG from 7/2008 [[Unable to Display Character: –]] 3/2012, transferring a total of 18,535 fibrinolytic-eligible STEMI patients to 347 PCI hospitals for pPCI or after fibrinolysis.

Results: Median drive time between STEMI referral and receiving hospitals was 62 min (IQR 39-97). Overall, 6,836 (37%) patients received fibrinolysis; 11,699 (63%) received pPCI. Median drive time was 70 min (IQR 52-102) in patients receiving fibrinolytics and 42 min [IQR 27-61] in patients receiving pPCI. Among pPCI patients, first DTB ≤120 min was achieved in 5,621 (48%) patients with a median driving time of 34 min (IQR 22-49); %DTB ≤120 min was significantly lower with increasing drive time (Figure). Fibrinolytic use was only 45% in patients with drive time >30 min.

Conclusion: Achieving first D2B ≤120 min remains a challenge among many contemporary US STEMI systems, particularly when drive times are >30-60 min. For fibrinolytic-eligible patients who are unlikely to meet DTB goals despite performance improvement measures, fibrinolysis is a treatment option to meet recommended performance measures.